

Subject

On Phlegmasia Dolens  
By

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of

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## Phlegmasia Dolens.

The remarkable affection of the lower extremities incident, almost exclusively, to lying in women, has received various denominations. It is the *Anasara serosa* of Cullen. In his Nosology, he ranks this genus of disease in the class cachexia and order Intumescencia. It is called by <sup>Savages</sup> *Phlegmasia Lactea*, by some writers *Oedema Lactum*. Dr Boerhaave places it under his second class *Phlegmasia*, and genus *Brunitis*. But as there are cases on record of its affecting the superior extremities, the correctness of this appellation is doubtful.

It is now pretty well known, in this country, by the name of *Phlegmasia Dolens*, or the vulgar title of milk-leg. But it must be enumerated among those diseases, whose causes recent inquiries have laboured to ascertain, without arriving at any conclusive decision.

Memorandum

The purpose of this report is to provide a summary of the work done during the past year. The work has been divided into three main sections: the first section deals with the general principles of the subject, the second section deals with the application of these principles to the particular case at hand, and the third section deals with the results of the work.

The first section deals with the general principles of the subject. It begins with a discussion of the basic concepts and definitions. It then goes on to discuss the various methods and techniques that have been used in the study of this subject. Finally, it discusses the various results that have been obtained from these studies.

The second section deals with the application of these principles to the particular case at hand. It begins with a discussion of the specific facts and circumstances of the case. It then goes on to discuss the various methods and techniques that have been used to analyze these facts and circumstances. Finally, it discusses the various results that have been obtained from these analyses.

The third section deals with the results of the work. It begins with a discussion of the various results that have been obtained from the studies and analyses. It then goes on to discuss the various conclusions that have been drawn from these results. Finally, it discusses the various recommendations that have been made on the basis of these conclusions.

The complaint is of comparatively rare occurrence, and its connexion in most cases, with the puerperal condition, has induced writers, to adopt an hypothesis, respecting its origin, too exclusive, and as to its nature unsatisfactory.

The latest observations and experience, have furnished numerous facts inconsistent with the ingenious theories advanced by the earlier writers. It is now admitted, that it is a more common affection than was formerly supposed, and it evidently has existed independent of the puerperal state.

There is scarcely any uniformity as to the period of its occurrence, and in the manner in which it invades the system. That other parts than the inferior extremities may, under particular circumstances, become its seat, that it is not unfrequently a consequential disease both various in its causes, and formidable in its character. There is unquestionably in many cases, a connexion between the puerperal state,



and Phlegmasia Dolens, yet, the latter has taken place, where the former had not existed, or where the interval was so great, as to forbid the presumption of any relationship. I have just affirmed, that the disease in question may, and does arise independent of the puerperal condition: In fact the disease is sometimes so little connected with the female functions, that we find the other sex not exempt from it.

Dr Beirman of Ontario New York, has detailed the history of a case, of the disease in a young man aged 19, and so far as a single instance can be brought to militate against a general rule; it furnishes conclusive evidence, that the superior extremities may become the seat of the disease. All the extremities, both arms and legs, were affected successively, and acquired the glabrous aspect and other pathognomonic symptoms of this striking affection.

Symptoms. When it affects puerperal women, it is usually preceded by marks of uterine irritation, and





a tender state of the parts within the pelvis. Before the appearance of any swelling, or even sense of pain in the limb about to be affected, the woman becomes very irritable, and her spirits very much depressed, without any sufficient reason, complaining only of transient pains in the region of the uterus, and from these only the approach of the disease has been foretold. The woman now complains of pain in the lower belly increased by pressure; the uterine region is somewhat swelled. The pulse is frequent, skin hot, thirst troublesome; and these symptoms are often preceded by shivering: stiffness and pain are now felt near the passage of the round ligament or about the origin of the sartorius muscle; the pain is attended by swelling, and these symptoms may proceed gradually down the limb. But more frequently they are seized suddenly with an acute pain in the calf of the leg, extending to the inside of the heel. The whole surface of the limb becomes excessively painful to the slightest pressure or



on touch; yet, without any apparent change, except the skin is glossy, and of a deadly paleness.

The countenance and the whole body has a certain degree of paleness, not unlike that of chlorotic or Dropsical persons. In about 24 hours after the pain commences, the limb begins to swell, and the pain is abated, in proportion to the swelling, but not entirely removed. From the moment of the attack all power of acting with the limb is lost; this however does not depend altogether on the pain, but also for a want of command over the muscles. It becomes tense hot and tumid but not red.

There are many varieties in the manner, in which the disease commences, as well in its progress; in some cases, the access of the disease is slower, and symptoms less violent, hesitating as it were, whether the disease should be formed or not.

It happens at no precise time after delivery, as it has come on at any period, from the fifth or sixth



day even to the end of the month. but most commonly from the fifth to the fourteenth day

The constitution is speedily and greatly affected. the pulse is very frequent being often 140 in the minute and generally quick and feeble, heat of body much increased; the tongue white and moist or clammy, the countenance pale, and dejected; thirst considerable; the appetite is lost; the bowels are either bound and the stools clay coloured or they are loose and the stools very fetid and bilious; the urine is voided in small quantities, is thick and of a muddy colour, unlike what has been observed in any other disease; the muddiness gradually disappears as the disease abates. The Lochial discharge sometimes stops or becomes fetid, in other cases it is not at all affected. The nights are spent without sleep and the patient perspires freely. After eight or ten days continuance according to its lenity or violence, the most urgent symptoms of the disease begin to abate.



The constitution being much disturbed and exalted at the beginning of the disease, renders it unequal to the due performance of its common functions.

The period at which the swelling reaches its acme, is various, but often, it is accomplished in 24. or 48. hours.

When the febrile symptoms, swelling &c. go off, the patient is left feeble, and the limb stiff and weak, and often for a time powerless. Either or both legs may be affected at the same time or successively.

Predisposing causes are great debility of the parts, from the pressure of the gravid uterus; preventing the return of blood from the lower extremities.

Plethora, full habit of body, not sucking the child &c.

Ecciting causes as some have supposed do not depend on the circumstances of labour, as the disease indiscriminately happens after those which were easy, and those which were difficult, or on any evident peculiarity of constitution; the corpulent and the thin, the feeble and the strong being equally liable to it.





or on rank in life, as the rich and the poor are alike  
subject to it, or on any peculiar treatment in child  
bed. Nor does any appearance during pregnancy de-  
note a disposition to it: the swelling of the inferor  
extremities being totally a different complaint  
But the whole disease seems to arise from some cir-  
cumstance, that occurs after delivery: It happens to  
those who had an abundance of milk, and those who  
had a scarcity, those who did, and those who did  
not give suck, and sometimes though rarely in  
abortions. In fact the disease has not hitherto been  
the subject of accurate and sufficient pathological  
investigation, and its causes are still obscure  
When we can detect any exciting cause, it is either  
constriction of the limb, or too great a quantity of food  
of an improper quality. wine or heating drinks, but  
most generally cold, which by checking the excretions  
& secretions give rise to the disease  
Resolution is the most frequent and desirable termi-



mation, the effused fluid being taken up by the absorbents, the patient recovers. But unfortunately, it sometimes happens that suppuration supervenes and ulcers are formed, which are difficult to heal.

In some few cases gangrene has been the termination, and in some instances the patient has been destroyed before either suppuration or gangrene has happened.

#### Thickening

Post mortem examinations show an extraordinary thickening of the cutis and adjoining cellular membrane; the large veins of the limb are inflamed; the inguinal glands are enlarged sometimes schisorous and all others not at all affected. But the muscles bone and other parts are free from any disease.

It has been common with almost all the popular writers (as I have before stated) on Phlegmasia Dolens to consider it as inseparably connected with the puerperal state and all their theoretical doctrines concerning its proximate cause are accordingly



built upon this assumption. It may not be improper, before I proceed to the treatment, to notice some of the most celebrated theories in the order in which they occur.

The first general idea on this subject deserving of notice, is that which was suggested by Sauvageau, in which he imputes the disease in question, to a metastasis of the *Tockia*.

The 2<sup>d</sup> theory to account for the same phenomena consists in the particular application to this subject of the celebrated doctrine of the metastasis of milk, this was first advanced by Puzos towards the middle of the last century; since that period, it has maintained a brilliant reputation in the continental schools of medicine; where indeed it has received several varieties of form to suit the plastic fancies of several writers, who have received and supported it. There are so obviously incorrect that they need no comment.

A third theory which has been formed on this subject,



which like its predecessor, has been presented under several different modifications, is that of obstruction or other morbid states of the Lymphatic organs, caused by offensive discharges from the uterus. The authors who first expressed this, in publications properly on the subject, have been Mr White of Manchester and Mr Nye of Gloucester. If it were caused by a rupture of the Lymphatics, we should have the same phenomina present in luxations: Their circulation is stopt in the application of the Tourniquet and there is no such bad effect.

But the fact, that the disease in question never arises from the offensive discharge of the womb, that take place in numerous diseases, with which the organ is affected, and the disease occurring independent of parturition, affords abundant refutation of that doctrine. Dr Hall published his essay on Phlegmasia Letera in 1810, in which he attempted to establish, that the proximate cause of the disease in question consists in an inflammatory affection, producing suddenly a considerable





effusion of serum and coagulable lymph into the cellular membrane of the limb; the seat of the inflammation he believed to be in all the soft parts of the limb, muscles, cutis, nerves, veins, glands, lymphatics &c.

It is worthy of remark, that this very capacious theory of a proximate cause of a disease, so extensive in its primary operations as to require for its seat and subject matter, such a great variety of structure, is not supported by its author, to be founded upon any evidence derived from anatomical investigation, nor have subsequent inquiries added the least support to it.

Dr. Savary in a paper read before the Medical Chirurgical Society of London, attempts to prove by post mortem examinations, that its proximate cause is a violent inflammation of one or more of the large veins within the pelvis, or its immediate neighbourhood. This must be considered as an effect rather than a cause; How is the sudden and almost instantaneous enlargement accounted for? How the pale colour and other



phenomena attendant to this disease. When a vein is inflamed from an incised or punctured wound, we have very different symptoms.

Dr DeWees mentions in his lectures that he is of opinion, that it is an inflammatory affection of the cellular membrane. It is now generally admitted that this disease is of an inflammatory nature; febrile irritation always accompanies it; its terminations are those common to other inflammatory diseases; and its most successful treatment is by such remedies as tend to lessen general excitement.

Dr Wilson of New York relates a case where Phlegmasia Dolens alternated with Pneumonic inflammation when the leg was affected, the pectoral symptoms subsided and vice versa. This case bears the most positive testimony of its inflammatory nature, we have all the symptoms characteristic of inflammation but redness. Dr DeWees says the vessels are too small to admit red globules as is the case in Puerperal fever, inflammation



of the eye, and mammary abscess. But the Pathology of this disease is still obscure and future observations must assign to it, its proper rank in nosological arrangement. But happily for its unfortunate subjects, one general plan of treatment is pursued by all.

It naturally divides itself into that of the limb and that of the constitution. When the patient is of a robust habit and is attacked with a painful tense swelling of one of the lower ~~extremities~~, accompanied by much heat, thirst, restlessness and other symptoms of pyrexia, the Antiphlogistic plan of treatment ought certainly to be pursued, treating it as a general inflammatory affection; not as a local disease.

The most effectual means of diminishing the plethora of the blood <sup>is</sup> repels and of diverting the irritation from the part affected should be employed; With this view the patient must be bled freely and the bleeding must be repeated as often as the urgency of the symptoms may require.



The skilful Physician who dares to act and think for himself, will judge of the quantity necessary to be drawn, not from any certain number of ounces, but the effect on the system. In the commencement of the attack if the stomach is disordered and oppressed, a gentle emetic becomes necessary, with a view to relieve the stomach, as well as to relax the system and equalise the circulation, thus diverting the current of blood from the limbs.

The bowels should be opened speedily; the articles best adapted for this purpose are the saline purgatives. They should be exhibited in small and repeated doses at intervals until the desired effect; we should not push them to the extent of full purging, the object in view is merely to keep the bowels in a soluble state.

If the patient is much debilitated, enemata should be preferred. Small and repeated doses of some Antimonial preparation combined with minute doses of Calomel should be exhibited; the Antimonial is to





promote a regular and gentle determination to the surface, while the calomel restores to their natural state the depraved secretions.

The pain is so intense, that it is impossible for the patient to enjoy the least repose; after the proper evacuations have been procured, Opium is a safe and advantageous remedy; we may use the Dovers Powder or we may unite the Opium with Calomel and Antimony or Spirits of Mindereri and Laudanum, taking care not to debilitate the patient too much by exciting a profuse diaphoresis.

Do Hosack has treated this affection with success by a combination of Calomel and squills, treating it as if it were a Dropsical affection. It is much to be doubted whether the diuretic operation of the Squills had any efficacy in the removal of the disease. If the preceding remedies should fail to have the desired effect, and the disease continue with unabated violence a slight Pityalism should



be induced as a dernier alternative.

We have now given the treatment, which we consider necessary for the removal of the affection of the testis; Our attention is next directed to the local treatment. When the inflammatory symptoms run high, leeches applied to the groin have been found of great service. So great is the reliance of some practitioners in this remedy, that it precludes in their opinion, the necessity of general bleeding; After which, blisters to the groin are universally recommended; cloths ~~warming~~ out of hot vinegar applied to the leg or the vapour bath of Vinagar have succeeded remarkably well in moderating the pain and tension: they are more servicable after the proper evacuations have been made. This simple mean assisted by keeping the bowels open, has been adopted with invariable success in one of the best regulated lying-in Hospitals in Europe. Should then, ~~far~~ more powerful sedatives or discutient remedies may be used, as an infusion of poppy heads, Camphorated oil, solution of



said on subject. Several of the names with which  
have all been recommended.

Dr John Clarke recommends strongly a position consist-  
ing of two, three or four and says he has used it with up  
a gentle compression and found the system restored  
by the leg, in many cases, never failing to bring relief.  
So long as the febrile symptoms continue, depletion  
must not be resorted to. After sometimes they abate and  
there is a paucity stage, the limb is seen in some  
measure to stiffen and is far from pain and when  
is put upon pulis. The pulse is weak, the tongue moist  
and clean. The bowels open the skin soft and perspiration  
the appetite increased.

It is now an stimulating tonic remains and I use.  
The leg may now be bathed with spirits, put into with  
the flesh brush salt between the toes, wetting or stan-  
dard roller leg, they applied, excision should be taken  
as soon as the patient stands. The same time as  
some have recommended to apply a blister, I prefer to be



calf of the leg to drain off the effused fluid; this is a hazardous remedy being apt to cause ulceration.

When there is an inflammatory discharge from the uterus inject tepid water or an infusion of Chamomile flowers. Regimen. The patient should be confined to bed as soon as taken, she should be covered lightly with the bed clothes, a large well ventilated room is to be preferred; the leg must be extended and the clothes elevated.

Diet. In the inflammatory stage the diet should consist entirely of the demulcent and acidulated drinks as barley water, lemonade, apple water, toast water, beef tea and chicken water &c. But as soon as the inflammatory symptoms subside then we use tonics and a nutritious diet. If the stomach is debilitated we may give wine in small quantities, thickened with bark, Columba, Gentian &c.

The food should be nourishing and easily digested; at first the farinaceous articles as Sago, Tapioca Arrow root, should be given, and after awhile Oysters





thicken &c. so as to increase its strength gradually.  
Here I conclude, but not without expressing a wish,  
that those who have more time and talents allowed  
them than I have, would take up the subject and  
do it justice. The candid critic will look with  
an indulgent eye upon my errors, and recollect  
that I write from compulsion; The better inform  
-ed will supply my deficiencies.





